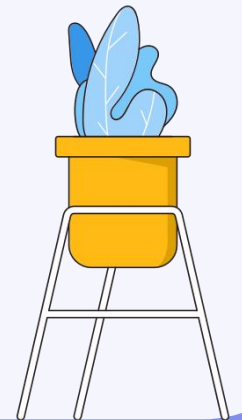




MEDICAL CHARITY SYSTEM REPORT

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Medical Charity System Report

1. System Overview

The Medical Charity System is a platform designed to manage and streamline the donation of medical equipment, clothes, and medicine for those in need. The system enables efficient tracking, collection, and distribution of donations, ensuring they reach charitable organizations.

Key Actors:

- Donors: Individuals who contribute items.
- Managers: Oversee the entire donation process.
- Agents: Responsible for collecting and delivering donations.

2. System Objectives

- Facilitate Donations: Allow donors to easily contribute items.
- Improve Management: Provide tools for managers to oversee donations, track statuses, and assign agents.
- Efficient Collection: Enable agents to manage donation pickups and track collection statuses.

3. User Roles and Features

Managers

Dashboard: Access a system-wide view of users, donation statuses, and types.

Manage Donations: Accept/reject donations, assign agents, and monitor donation progress.

Oversee Operations: Ensure smooth functioning of the system.

Donors

Dashboard: View the status of donations, categorized by type.

Manage Donations: Submit new donation requests and modify or update existing ones.

Profile Updates: Maintain and update personal information.

Agents

Dashboard: Monitor assigned and collected donation requests.

Task Management: Collect donations from donors, mark them as complete, and review previous tasks.

4. Database Design

User Collection

Fields: firstName, lastName, email, password, gender, address, phone, role, joinedTime

Role: Admin, Donor, or Agent.

Authentication: Users authenticate via email and password, with role-based access.

```
const mongoose = require("mongoose");

const userSchema = new mongoose.Schema({

  firstName: {

    type: String,

    required: true

  },

  lastName: {

    type: String,

    required: true

  },

  email: {

    type: String,

    required: true

  },

  password: {

    type: String,

    required: true

  },

  gender: {

    type: String,

    enum: ["male", "female"]

  },

  },
```

```

    address: String,

    phone: Number,

    joinedTime: {
      type: Date,
      default: Date.now
    },

    role: {
      type: String,
      enum: ["admin", "donor", "agent"],
      required: true
    }
  });

```

Equipment Collection

Fields: donor, agent, category, itemDescription, condition, quantity, deliveryTime, address, phone, status, image

Function: Tracks details of donations, including their status and relevant messages.

```

const mongoose = require("mongoose");

const equipmentSchema = new mongoose.Schema({
  donor: {
    type: mongoose.Schema.Types.ObjectId,
    ref: "users",
    required: true
  },
  agent: {

```

```
    type: mongoose.Schema.Types.ObjectId,
    ref: "users",
  },
  category: {
    type: String,
    enum: ["medical equipment", "clothes", "medicine"],
    required: true
  },
  itemDescription: {
    type: String,
    required: true
  },
  condition: {
    type: String,
    required: true
  },
  quantity: {
    type: Number,
    required: true
  },
  deliveryTime: {
    type: Date
  },
  address: {
    type: String,
    required: true
  },
  phone: {
    type: Number,
    required: true
  }
}
```

```

    },
    collectionTime: {
        type: Date
    },
    donorToAdminMsg: String,
    adminToAgentMsg: String,
    addedAt: {
        type: Date,
        default: Date.now
    },
    status: {
        type: String,
        enum: ["pending", "rejected", "accepted", "assigned", "collected", "available"],
        required: true,
        default: "pending"
    },
    image :{
        type:String,
        required: false
    }
});

```

5. System Functions

User Management

Registration and login for managers, donors, and agents.

Role-based access control to ensure proper permissions.

Donation Management

Donors submit donations, view statuses, and track progress.

Managers accept/reject donations and assign tasks to agents.

Agents collect donations and mark them as complete.

Dashboard

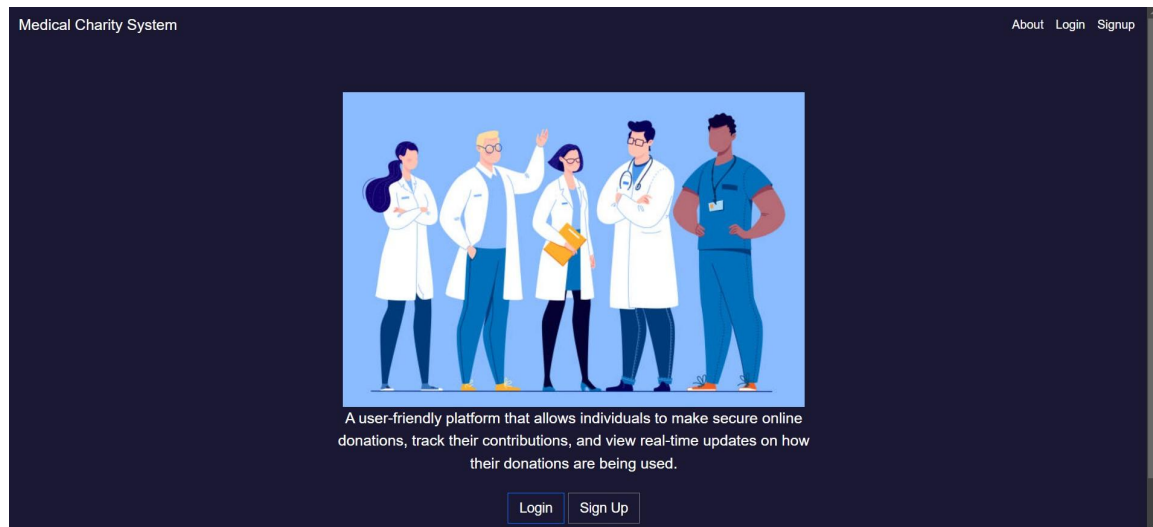
Managers, donors, and agents have personalized dashboards for monitoring activities and donation progress.

Donation Tracking

Real-time tracking of donation statuses: pending, accepted, assigned, collected.

6. Main Screens

Home Screen



Sign up roles

Email address

Password

Confirm Password

Gender

- ☐ Male
☐ Female

Signup as

Donor



Donor

Agent

Manager

Already have an account? [Login here](#)

Login Screen

User Login

Email address

Password

Submit

Don't have an account? [Sign up here](#)

Profile For Users

Medical Charity System

AboutLoginSignup

Mohamed Elbarber

Profile

My Profile

Dashboard

Agents

Pending Requests

Previous Requests

Log out

First Name

Mohamed

Last Name

Elbarber

Email

elbarber@gmail.com

Gender: ☒ Male ☐ Female

Address

Dameitta

Phone

1022302763

Update

Manager Dashboard



Pending Requests

Medical Charity System

About Login Signup

Mohamed Elbarber

≡ Pending Requests

My Profile

Dashboard

Agents

Pending Requests

Previous Requests

Log out

#	Donor name	Category	Item	Condition	Quantity	Address to collect	Phone	Actions	
1	Logan Roy	medical equipment	oxygen cylinder	new	2	Domyat Egypt	1021523634	accepted	View
2	Mohamed Kudus	clothes	clothes for kids 14 y.	new	20	cairo	101421612	pending	View
3	Mohamed Kudus	medicine	vikoden	new	15	damietta	1041363212	pending	View
4	Julian Alvarez	clothes	dress for kids	new	2	dameitta	1030154215	pending	View
5	Mohamed Saeed	medical equipment	Peacemaker	new	2	dameitta	1024136272	pending	View

Accept or Reject Donations

Mohamed Elbarber

≡ Requests

My Profile

Dashboard

Agents

Pending Requests

Previous Requests

Log out

Donor Name: Mohamed Kudus

Category: clothes

Item: clothes for kids 14 y.

Quantity: 20

Condition: new

Address to collect: cairo

Phone: 101421612

Message from Donor:
Kindly Accept this.

Status: pending

[Accept](#) [Reject](#)

Assign Agent

Medical Charity System

AboutLoginSignup

Mohamed Elbarber

Assign Agent

My Profile

Dashboard

Agents

Pending Requests

Previous Requests

Log out

Donor Name

Mohamed Kudus

Address

cairo

Phone

101421612

Select Agent

Jimmy McGill - agent

Message to Agent

Deliver This to the Charity .

Assign

Donor Dashboard

Medical Charity System

AboutLoginSignup

Logan Roy

Requests that Not processed Yet

My Profile

Dashboard

Donate

My Pending Requests

My Previous Requests

Log out

1

Accepted Requests - and will be assigned Soon

0

Requests Not Collected yet

Donation Types

2

Medical Equipment Donations

1

Clothes Donations

1

Medicine Donations

Donate

Medical Charity System

AboutLoginSignup

Logan Roy

Donate Here Please.

My Profile

Dashboard

Donate

My Pending Requests

My Previous Requests

Log out

Donation Category

Medical Equipment

Item Description

oxygen cylinder

Item Image

Choose Fileoxygen-cylinder-regulator.jpg

Quantity

2

Condition

New

Address for Pickup

Domyat

Phone

1021523634

Delivery Time

01/01/2025 01:01 AM

Pending Requests

My Profile

Dashboard


Donate

My Pending Requests

My Previous Requests

Log out

Category: medical equipment



Item Description: test tube

Quantity: 5

Condition: new

Address for Pickup: Domyat

Phone: 1021523634

Delivery Time: Wed Jan 01 2025 01:01:00 GMT+0200 (Eastern European Standard Time)

Message: i want to donate these test tubes.

Status: Your donation request hasn't been processed yet.

Edit

Delete

Previous Requests

Medical Charity System

AboutLoginSignup

Logan Roy

Previous Requests

#	Category	Item	Condition	Quantity	Address	Delivery Time	Agent Assigned	collection Time
1	clothes	collection of children clothes	new	13	Domyat	04-Jan-2025, 2:02 pm	Jimmy McGill	14-Dec-2024, 6:10 am
2	medical equipment	MRI Device	gently used	1	Tanta	05-May-2025, 1:11 am	Jimmy McGill	14-Dec-2024, 6:10 am

Agent Dashboard

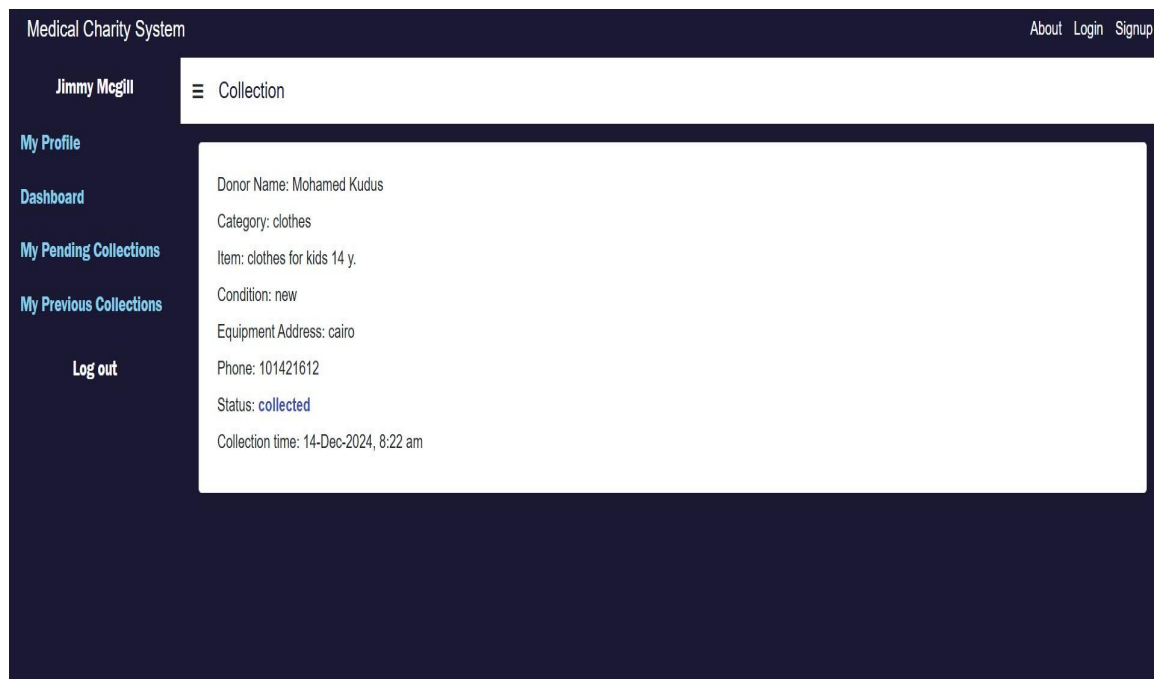
The screenshot shows a web browser window displaying the 'Medical Charity System' dashboard for user 'Jimmy McGill'. The dashboard has a dark blue sidebar with navigation links: 'My Profile', 'Dashboard' (highlighted), 'My Pending Collections', 'My Previous Collections', and 'Log out'. The main content area shows two summary cards: a red card with '0 Requests assigned to you for collection' and a green card with '2 Requests successfully collected by you'. The browser's address bar shows 'localhost:3500/agent/dashboard'. The Windows taskbar at the bottom shows the time as 6:10 AM on 12/14/2024.

Agent Pending Collections

The screenshot shows the 'Medical Charity System' 'Pending Collections' page for user 'Jimmy McGill'. The sidebar navigation is identical to the dashboard, with 'My Pending Collections' highlighted. The main content area displays a table of pending collections. The table has columns: '#', 'Donor Name', 'Category', 'Item', 'Condition', 'Quantity', 'Address', 'Phone', and 'Actions'. There is one row of data for a collection from Mohamed Kudus. The 'Actions' column for this row contains 'View' and 'Collect' buttons.

#	Donor Name	Category	Item	Condition	Quantity	Address	Phone	Actions
1	Mohamed Kudus	clothes	clothes for kids 14 y.	new	20	cairo	101421612	<button>View</button> <button>Collect</button>

Collection Status



7. Technology Used

- Node.js: Backend runtime for scalable applications.
- MongoDB: NoSQL database for data storage.
- Express: Web framework for handling requests.
- EJS: Template engine for rendering dynamic HTML views.
- Bootstrap: Frontend framework for responsive design.
- Mongoose: ODM for MongoDB interaction.
- bcryptjs: Password hashing for security.
- passport: User authentication middleware.

- dotenv: Loads environment variables.
- multer: Handles file uploads.
- connect-flash: Provides flash message functionality.

8. Conclusion

The Medical Charity System effectively streamlines the donation process, ensuring that donations are collected and distributed efficiently. The system's structured user roles, robust tracking capabilities, and intuitive dashboards provide transparency and ease of use for all participants.

9. References

1. Node.js Documentation:Node.js. (2024). About Node.js. Retrieved from <https://nodejs.org>
2. MongoDB Documentation:MongoDB Inc. (2024). MongoDB Developer Manual. Retrieved from <https://www.mongodb.com>
3. Express Framework Documentation:StrongLoop/IBM. (2024). Express.js Guide. Retrieved from <https://expressjs.com>
4. EJS Documentation:EJS. (2024). Embedded JavaScript Templates. Retrieved from <https://ejs.co>
5. Bootstrap Documentation:Bootstrap Team. (2024). Bootstrap 5.3. Retrieved from <https://getbootstrap.com>
6. Mongoose ODM:Mongoose. (2024). MongoDB ODM for Node.js. Retrieved from <https://mongoosejs.com>
7. Bcryptjs:bcryptjs. (2024). Password Hashing for Node.js. Retrieved from <https://www.npmjs.com/package/bcryptjs>
8. Multer for File Upload:Multer. (2024). Handling File Uploads in Node.js. Retrieved from <https://www.npmjs.com/package/multer>
9. Passport.js:Passport. (2024). Authentication Middleware for Node.js. Retrieved from <http://www.passportjs.org>